REMARKS

Claims 2-7, 9-14 and 16-21 are pending in the application.

Claims 2-7, 9-14 and 16-21 were rejected.

Claims 2, 5, 6, 7, 14 and 21 have been amended to correct typographical errors as requested by Examiner.

Claim Objections

Claims 2, 5, 6, 7, 14 and 21 were objected to because of informalities in the form of misspelled words which have been corrected herein, and these objections are believed to be obviated.

Claim Rejections

Claims 2 and 5 were rejected under 35 U.S.C. 102(e) as being anticipated by *Lin et al.* (USP 6,980,211 B2, hereinafter "Lin"). These rejections are traversed.

A prior art reference anticipates a claimed invention under 35 U.S.C. § 102 only if every element of the claimed invention is identically shown in that single reference, arranged as they are in the claims. (*MPEP § 2131; In re Bond, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990)*). Anticipation is only shown where each and every limitation of the claimed invention is found in a single prior art reference. (*MPEP § 2131; In re Donohue, 766 F.2d 531, 534, 226 U.S.P.Q. 619, 621 (Fed. Cir. 1985)*).

Independent claim 2 requires "loading a circuit-requirements file, the circuit-requirements file being in a first format, and generating a corresponding schematic definition file, the schematic

definition file being in a second format". Lin does not disclose a schematic definition file in a second format, distinct from the circuit-requirements file in a first format.

The Examiner alleges that the claimed "circuit-requirements file" is satisfied by Lin's "netlist file." The Examiner then alleges that the claimed "schematic definition file" is "shown in [Lin's] Figs. 6-11".

On the contrary, Lin states clearly that Figures 5-10 are each "schematic[s] as presented on a display", and are not files at all. Figure 11 is described as "a new topology ... as presented by a present invention topology display mode". Figure 11 is not a file. Figures 5-11 clearly do not represent a "schematic definition file" in a second format generated corresponding to the circuit-requirements file, as is claim 2. Certainly nothing is Lin teaches or suggests that "schematic[s] as presented on a display" in these figures can then somehow be "loaded" from the display, also as required by claim 2.

Lin therefore cannon, and does not, anticipate claim 2, and this rejection is traversed.

Claims 2 and 5 each require a component rule set. No component rule set is disclosed or even mentioned by Lin.

Claim 5 requires "defining a location of a first component of the schematic definition file". As described above, Lin does not teach a schematic definition file. Claim 5 further requires "defining locations of a plurality of second components of the schematic definition file in relation to the location of the first component". Lin does not teach or suggest defining the location of a first component then defining the locations of a plurality of second components in relation to the location of the first component.

Claims 2 and 5 each require "creating a schematic output file corresponding to the circuit component placement relationships and the schematic definition file, wherein the schematic output file describes an automatically-generated electrical schematic corresponding to the schematic definition file". This feature is not taught or suggested by Lin.

Lin does not appear to automatically generate an electrical schematic corresponding to circuit component placement relationship and a schematic definition file, and not only because Lin does not teach or suggest a schematic definition file as alleged by the Examiner. Lin describes in detail that a user creates an electrical schematic, and then Lin's system can do some automatic re-routing of connections if the user manually moves one of the circuit components or other wise instructs the system to change the layout. Indeed, even Lin's claim 1indicates that the invention is "A method for enabling a user to generate a schematic diagram..."

While Lin's system does appear to automate some routing and display functions, it does not create a schematic output file corresponding to the circuit component placement relationships and the schematic definition file, wherein the schematic output file describes an automatically-generated electrical schematic corresponding to the schematic definition file, as required by claims 2 and 5.

Claims 2 and 5 therefore are not anticipated by Lin, and these rejections are traversed.

Claims 3-4, 6-7, 9-14 and 16-21 were rejected under 36 U.S.C. 103(a) as being obvious over Lin in view of *Hatsch, et al.* (U. S. Patent 6,735,742 B2, hereinafter "Hatsch") or *Shiitani, et al.* (U.S. Patent No. 6,545,673 B1, hereinafter "Shiitani").

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. (*MPEP § 2142; In re Fritch, 972 F.2d 1260, 1262,*

23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992)). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. (*MPEP § 2142; In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984)*). Only when a *prima facie* case of obviousness is established does the burden shift to the Applicant to produce evidence of nonobviousness. (*MPEP § 2142; In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993)*). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the Applicant is entitled to grant of a patent. (*In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); In re Grabiak, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985)*).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. (*In re Bell, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993)*). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on the Applicant's disclosure. (*MPEP § 2142*).

Claim 6 requires "creating a schematic output file corresponding to the circuit component placement relationships and the schematic definition file, wherein the schematic output file describes an automatically-generated electrical schematic corresponding to the schematic definition file". Claim 7 requires "creating a schematic output file corresponding to the circuit component placement relationships and the schematic definition file, wherein the schematic output file describes an automatically-generated electrical schematic corresponding to the schematic definition file, wherein the schematic output file includes both two-dimensional and three-dimensional location data for a plurality of electrical components".

Claim 14 requires "means for creating a schematic output file corresponding to the circuit component placement relationships and the schematic definition file, wherein the schematic output file describes an automatically-generated electrical schematic corresponding to the schematic definition file, wherein the schematic output file includes both two-dimensional and three-dimensional location data for a plurality of electrical components. Claim 21 requires "instructions for creating a schematic output file corresponding to the circuit component placement relationships and the schematic definition file, wherein the schematic output file describes an automatically-generated electrical schematic corresponding to the schematic definition file, wherein the schematic output file includes both two-dimensional and three-dimensional location data for a plurality of electrical components".

As described above, these features are not taught or suggested by Lin or the other art of reference. Lin does not automatically generate an electrical schematic corresponding to circuit component placement relationship and a schematic definition file, and not only because Lin does not

teach or suggest a schematic definition file as alleged by the Examiner. Lin describes in detail that a user creates an electrical schematic, and then Lin's system can do some automatic re-routing of connections if the user manually moves one of the circuit components or other wise instructs the system to change the layout. Indeed, even Lin's claim 1 indicates that the invention is "A method for enabling a user to generate a schematic diagram..."

While Lin's system does appear to automate some routing and display functions, neither it nor the other art of record, alone or in combination, teaches or suggests creating a schematic output file corresponding to the circuit component placement relationships and the schematic definition file, wherein the schematic output file describes an automatically-generated electrical schematic corresponding to the schematic definition file, as required by claims 6, 7, 14, and 21.

Of course, claims 6, 7, 14, and 21 also require a component rule set, and nothing in the art of record teaches or suggests a component rule set. Claims 6, 7, 14, and 21 also require a schematic definition file, and the only "schematic definition files" alleged by the Examiner are actually "displays". Finally, claims 6, 7, 14, and 21 require determining circuit component placement relationships according to the schematic definition file and a component rule set, another feature not taught or suggested by any art of record.

While Hatsch does include a brief mention that "the coordinate system can also take into account of a Z coordinate perpendicular to the X and Y coordinates", this does not teach or suggest "displaying a three-dimensional image, corresponding to the automatically-generated electrical schematic, showing the relative three-dimensional location of multiple circuit components", as in claim 6, or that a "schematic output file includes both two-dimensional and three-dimensional

location data for a plurality of electrical components" as in claims 7, 14, and 21, where the schematic output file corresponds to the other limitations of the claims.

Further, there is no proper motivation to combine Lin and Hatsch, but this need not be discussed in detail here has even if the combination is made, the proposed combination still does not teach or suggest the limitations of the claims, as discussed above.

The Office Action does not discuss Shiitani at all, and its general teachings of 3D displays do not appear to be particularly relevant to the instant claims.

Therefore, the limitations of claims 6, 7, 14, and 21 are not taught or suggested by the art of record, alone or in combination, and these rejections are traversed. Similarly, dependent claims 3-3, 9-13, and 16-21 distinguish over all art of record.

Applicant also respectfully notes that in his rejection of claims 9 and 16, the Examiner states, without basis, that "the netlist file is in textual file format and the schematic file is textual and symbolic file format." Lin does not disclose a "schematic file" and does not disclose anything in a "symbolic file format". Those terms do not even appear in Lin's disclosure.

CONCLUSION

As a result of the foregoing, the Applicant asserts that the remaining Claims in the Application are in condition for allowance, and respectfully requests an early allowance of such Claims.

If any issues arise, or if the Examiner has any suggestions for expediting allowance of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at ***manderson@munckbutrus.com***.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Davis Munck Deposit Account No. 50-0208.

Respectfully submitted,

MUNCK BUTRUS P.C.

Date: 5/10/6

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